

RAISING WASCALLY WABBITS FOR DIN-DINS

By Don Fallick

Which farm animal is best at converting pounds of feed to pounds of meat, produces the least wastage, the best fertilizer, produces the largest return per investment dollar with the least capital risk, and performs equally well in all environments, from central city to primitive backwoods? The answer, of course, is the lovable domestic rabbit.

A pair of rabbits can produce as much red meat in a year as an angus calf, while requiring about the same outlay of time and money as a pair of house cats. The meat tastes and looks a lot like chicken, is nearly as low in saturated fats, and can be prepared the same ways. But rabbits are quiet, require very little space, raise their own young, never need to be plucked or clipped, and make excellent pets. Ever try to housebreak a chicken? And rabbit manure can be applied directly to the vegetable garden without composting, with no danger of "burning" plants.

Rabbits are ideal for urbanites who plan to move to the country and want to learn how to raise their own meat. In many cities, rabbits are classed as pets and can be kept legally in zones where "farm animals" are forbidden. Even in areas where they are technically illegal, city health officials will often wink at a small rabbitry, as long as it is kept clean.

Choosing a breed

Neophyte rabbit breeders can be bewildered by the amount of informa-

tion available for "rabbit fanciers."

Although there are many different breeds, most rabbits fall into one of four easily recognizable types.

Dwarf types, such as the Dutch and Mini-lop, are used for pets and for competitive shows. They produce plenty of manure for a small garden, and cost virtually nothing to keep, but are too small to be useful for meat or fur. Even experienced does (females) may fail to provide enough milk for a typical litter of four to six small bunnies.

Giant breeds, such as the Welsh, are sometimes used for meat by breeders who want a large carcass, but they take much longer to grow to butchering size than other breeds. In fact, it costs nearly twice as much per pound of meat to raise giant breeds. There will be much more waste in a giant carcass, as the bones are heavier than in a normal size rabbit. Furs are generally of good quality. Litters are small, but the does are usually good mothers.

Commercial breeders usually prefer the all-white "**production**" breeds such as the California or New Zealand. The uniform-colored, pure white skins are preferred by buyers, who are usually planning to dye the fur anyway. These breeds have been selected for fast weight gain, large litter size, and hardiness. A typical production rabbit should grow to butcher-



ing weight in six to eight weeks and to breeding age in three months. Does usually kindle (birth) a litter of eight to twelve bunnies, and can usually nurse eight or ten of them.

Colored breeds are most often raised by 4-H club members, homesteaders, and other small-herd operators. Sizes vary, but most average just a bit smaller than the commercial breeds. Does make excellent mothers, raising average litters of six to ten. Bunnies reach butchering weight in about eight weeks and are very hardy. They make excellent pets, as they are smart and often have interesting color variations. Fur quality varies with the breed but is almost always soft and silky. Angora rabbits and satins, for example, are usually raised primarily for their fur, though the meat-producing ability and other qualities are indistinguishable from other, similar-sized breeds. Lop-eared rabbits of normal size can be considered a color breed in this respect, too, even if their fur happens to be white.

Color breeds generally cost less to buy than commercial rabbits and are the best for a beginner. If there is no breeder in your neighborhood, look in the classified section of your local newspaper, especially around Easter time, or at a local swap meet. Or contact the 4-H leader at the county

extension service of your state university. The extension agent may be listed under either county government or state university in your telephone directory. You can almost always find lots of rabbit breeders at your county or state fair, too.

Buying rabbits

In buying a meat rabbit, it is not necessary to get a pedigreed one. They cost more and may be no better meat producers than a “scrub” rabbit.

Tell the breeder that you are looking for a herd sire (male) and breeding doe. They need not be the same color or breed, but should be about the same size and should not be closely related to each other. In rabbits, especially, incest produces birth defects.

Ask the seller for a proven mother. First time mothers throw small litters, and may have no idea how to care for them. It may take two or even three litters before a new mom catches on. If a doe hasn't learned to raise babies by then, she probably never will.

Some breeders will sell such a cull, rather than butcher her themselves. There are no guarantees in the rabbit business, but most folks will admit that they are culling poor producers if you ask them directly. Many customers buy such rabbits to butcher, so make sure the owner knows you are looking for breeding stock.

Breeders will sometimes sell off a good mother if the herd is getting too big or if they are getting out of the rabbit business. But the most common reason for parting with a good breeding rabbit is age.

A doe more than two or three years old starts to slow down, producing litters of smaller and smaller size. It is uneconomical to keep such a doe in a large herd. But you can benefit from an experienced mother who will raise your next generation of does and teach them how to be good mothers. Such an older doe should cost no more than \$15 or \$20.

Ask about her age, average litter size, and recent litter sizes. Three or four years is old for a doe rabbit. Don't be too thrilled with reports of huge litter sizes. A doe who typically kindles twelve but can only raise eight is no bargain.

On the other hand, a doe who typically kindles and raises eight to ten, but is down to four or five per litter is nearly exhausted. She may never kindle again, but if she does, her daughters are likely to be good producers. If you do buy such a doe, don't pay more than a few dollars for her. Her owner has already got everything he can out of her and is only selling her so he won't have to butcher a pet himself.

When you go to buy your first rabbits, ask the breeder to show you how to pick them up and how to sex them. You can grab them by the scruff of the neck (never by the ears!), but there are other ways that are much more comfortable for the rabbit and less likely to get you scratched. Always wear long sleeves when handling rabbits. You can trim their claws with a dog claw trimmer, but you may get scratched anyway.

It is virtually impossible to describe how to sex a rabbit in words. Females have a clitoris that is nearly as big as the male's penis, and both are sheathed internally when not in use. Get someone to show you.

Equipment

To begin keeping rabbits you will need two cages right away and a third one very soon. Keep the male and female separated except when they are breeding. The father will kill his own babies and will greatly annoy a pregnant doe.

You only need one herd sire for up to five or six does. Mature bucks kept together will fight and may kill or castrate each other. Most bucks reach breeding age at around two months, does at three to four months.

Each cage must include a feeder and a water dish and some place for the rabbit to get off the wire floor. The mother's cage will need a nest box with sides at least six-inches high. You want the mother to be able to get in and out easily, but not the babies.

Newborn bunnies do not have enough fur on their bodies to keep warm, even in hot climates, and will die if they can crawl out of the nest box. The box should be large enough for the mother to lie down in but small enough to get in and out of the cage easily. Some homemade cages have built-in nest boxes. Most serious breeders prefer removable ones, as they are easier to keep clean.

If you make your own cages, you can use any kind of wire for the sides, as long as the holes are too small for the rabbits to get through. Even half-inch mesh chicken wire will work. But the floors must be made of $\frac{3}{8}$ -inch hardware cloth, with the sharp side down. Holes larger than that will catch the rabbits' feet, while smaller holes will not pass their stools.

It is very important to keep rabbits out of the wind. They can stand great extremes of cold if there is no breeze blowing on them. If you do not have a shed or building to keep them in, one alternative that works is to attach scraps of carpet to the sides of each cage so they hang all the way to the ground. Shingles or tar paper will protect the top of the cage. A good roof is important. Rabbit skin is porous and will not keep out water. It also will not keep water in. In hot weather, rabbits need access to good ventilation.

Feeders and food

Feeders for pelletized rabbit food are available at most farm-supply stores, and are a good investment. They can be installed through the wire, so they can be filled without opening the cage. Actually, rabbits will eat food pellets out of any kind of container. But they will chew plastic containers to bits in short order, and they will tip over any

container they can, spilling their food on the ground.

If you use homemade containers, make sure the rabbits cannot tip them over. Wire them to the cage or nail them to a piece of wood. Punch holes in the bottom of home-made feeders, to allow the “fines” to fall through. If they collect, the rabbits may inhale them while eating and contract lung problems.

An average size rabbit needs about a cup of alfalfa pellets or a “flake” of baled alfalfa hay a day. Rabbits are nocturnal, so do most of their eating at night. They can go for several days without food if they have to, but will die of thirst quickly because of their porous skin. They should always have water available, but especially in hot weather.

Rabbits love most raw vegetables and grains. They will even eat weeds from the garden. It's not a good idea to feed too much wet or green food to rabbits that are not used to it, though. Increase the amount gradually while watching for signs of diarrhea. They also need salt and minerals. Round mineral blocks, suitable for wiring to the side of the cage, are sold in pet stores and feed stores.

Rabbits love to chew on anything they can reach and can demolish a wood-frame cage. To keep them from such “cribbing,” some breeders give their rabbits chunks of broken drywall to play with. Chewing the drywall keeps their teeth in good shape, and may provide a few minerals as well. It will not hurt them.

Water bottles with lick-type valves are great if you live in an area where it does not freeze in winter. Many breeders use stone crocks for rabbit waterers as the rabbits cannot chew them up or tip them over. But they get cold in winter and have to be removed to thaw out.

A cheap, easy compromise is to make water dishes out of cut-down #10 cans such as large coffee cans. If you cut down such a can, it is necessary to hammer over the raw edge so

the rabbits don't cut themselves. Punch or drill a couple of holes near the top and wire the can to the cage, so the rabbits can't tip it over or pull it to the back of the cage. Tin can waterers are easily thawed by running the can under hot water. Or you can carry hot water to the barn, pour some in the can, wait a few minutes, and bang out the ice.

Breeding

Put the buck (male) in with the doe for a few minutes and watch what happens. If she is in heat, she will soon stand still and allow him to mate. If she fights with him, or persists in running away, she is not ready.

Put him in her cage for a few minutes every day until she allows him to breed, and record the date. Twenty-eight days later she should kindle. Protect her from anything that might frighten her, such as the immediate presence of a dog or cat or loud, sudden noises. Rabbits have the ability to resorb their babies, right up to the time of birth, if they become frightened.

Put the nest box in the mother's cage three or four days early to give her time to get used to it. Twenty-four hours before birth, the doe will pull out large amounts of her soft underfur to line the nest. If you think she is not pulling enough, give her some straw.

Leave the babies alone for the first day or two. Rabbits have exquisitely sensitive noses and may reject their babies if they have even a whiff of human scent on them. If you must handle the newborns, put a

small dab of Mentholatum® on the mother's nose. By the time she gets it off, the human scent will have faded.

Remove any babies that die or the mother may eat them. If a doe kindles more babies than she can feed, you may be able to foster them on another doe who kindled at about the same time. Use the Mentholatum trick to fool the new mother, too, and keep a sharp watch, as she may kill them anyway.

Feed pregnant and nursing does all that they will eat. After the first two days, it's important to pet the bunnies every day. Studies have shown that rabbits actually grow significantly faster if they are petted. This is a great job for children, as long as they are taught not to let the rabbits escape.

Some breeders feed their rabbits a few bits of Calf-Manna, a dietary supplement for cattle. Rabbits think it's candy. If you use Calf-Manna, never give more than three or four pellets

Waiting for Something to Happen

There was the dent in the fender of the '49 Merc
That made it look cockeyed at night;
One headlight on the road,
The other up in the branches as we whizzed by.
My friend was eighteen and owned the car;
I was sixteen and brewed beer in a corner of our barn.
We cruised the small towns
And backwoods of southern New Hampshire
With the windows down and the radio wailing—
It was 1960, our whole lives were ahead of us,
But we were waiting for something to happen.
We always drank what we didn't sell
(Fifty cents a quart—for gas and cigarettes).
But around eleven
I was usually in the headlights throwing up,
My friend behind the wheel, laughing and jeering,
And I'd swear I'd never get drunk again.
But we'd be back out the next night,
A bag of bottles in back,
Selling what we could,
Passing an open back and forth,
And waiting for something to happen.

—John Silveira
Ojai, CA

per day. More than that can cause fatal attacks of gas.

Once they have tasted Calf-Manna, even shy bunnies will take it directly from your hand. Such trust can be a great help at butchering time, or when a rabbit has escaped. Calf-Manna is expensive, but a bag will last even a large herd a year or more.

When the babies are old enough to leave and enter the nest by themselves, and are eating and drinking on their own, it is time to move them to their own cage. It's okay to keep several bunnies in one cage, as long as they have enough room to hop around, but be sure to separate the females from the males when they're a month old or so. The breeding ages mentioned above are averages. Some individuals may breed at a much younger age. It's horrible to butcher a female "fryer," only to find six or seven dying fetuses.

Slaughtering

The only unpleasant part of keeping rabbits is killing and butchering them. Even this isn't as bad as it might be, as they rarely put up a fuss, and are easier to skin than any other domestic animal. Contrary to popular belief, rabbits do have voices and may scream when you kill them, but this is extremely rare. In 25 years of rabbit keeping, I have only heard a rabbit scream twice.

Butchering equipment for rabbits is very simple. I use an old hammer handle, an empty bucket, a very sharp paring knife, and a clean pair of pruning scissors or general-purpose kitchen shears. I could do without the shears, but they make skinning and butchering go much faster. I wear old clothes that I don't mind getting bloody.

I also use a homemade gambrel-stick to hang the rabbit on for skinning. This is just a piece of wood with a couple of 16d nails hammered all the way through, about a foot apart. Nail the stick to a tree with the "hook"

nails poking out, and bent up a little to hold the rabbit. I know other breeders who just lay the dead rabbit on the kitchen table, but I find skinning easier with the rabbit hanging by the hind feet.

There is a method for quickly and easily killing young rabbits of fryer size by dislocating the head with the bare hands. This method is the most humane, but is not easy to learn, and must be demonstrated by someone skilled in the technique. If you know a breeder who has the skill, get him to teach you. This only works well with young rabbits anyway.

For older rabbits, use the tried-and-true method of stunning the rabbit and slitting its throat.

The best way is to sit the rabbit on a tree stump or chopping block, pet it until it relaxes, and hit it hard in the back of the head, just above the neck, with a hammer handle, piece of iron pipe, etc. That's why this kind of a blow is called a "rabbit punch." The rabbit will be stunned, and may shake and shiver, but will not object while you chop off its head with a hatchet, or just hang it up and slit its throat with a sharp knife.

Skinning

To skin a rabbit, bend one hind foot to expose the Achilles tendon and poke one of the hook nails of the gambrel-stick through the skin, between the tendon and the bone. Repeat with the other foot so the carcass is hanging facing out. Cut off the head, if you haven't done so already, and drop into the bucket. Some people feed rabbit heads to their dogs. I feel this only trains the dogs to kill rabbits, so I throw the heads away.

Cut the skin all the way around one hind leg, just below the foot, being careful not to cut the tendon. Repeat with the other hind foot, then slit the skin down the "inseams" of both legs. Join the cuts in front of the sex organs.

Pull the skin off the legs. Force your hand between the skin and the muscle

if need be in order to make the skin come off. Work your hands around to the back, until they meet behind the tail.

Leaving the skin and fur on the tail, cut the rest of the skin away from the tail. The carcass should now appear to be wearing a long dress open at the knees. Remove the dress by turning it inside out. You may have to slice carefully between skin and muscles in a few places, but unless the rabbit is very old it should come off pretty easily with a steady, downward pull. Rabbit skin tears easily, so be careful.

When you reach the arms and neck, you will have to work the skin with your fingers to get it over the arms and the stump of the neck. It will look confusing. Just keep pulling and working with the fingers, alternately, until the skin is completely inside out, down to the wrists.

Cut the forepaws completely off at the wrist, allowing them to stay with the skin. The rabbit should now be entirely free of skin, except for the hind feet, tail, and genitals.

Using pruning shears or kitchen scissors, cut through the tail where it joins the body. Slide one blade of the shears between the anus and the pelvic bone and cut through the front of the pelvis on each side of the anus. Hold onto the tail so the genitals and anus don't slip inside.

Place the scrap bucket below the carcass and slit the membrane holding the guts in, all the way down the front. Using the tail for a handle, carefully work the anus through the opening you made in the pelvis and allow the guts to fall into the bucket. Be very careful not to prick the bladder or you'll get urine all over the meat and maybe all over you.

If you do, don't panic. Rabbit pee won't hurt you. Just wash it off the meat right away and don't tell anyone. Urine is sterile when it comes out of the bladder and will not contaminate the meat, if you wash it off right away.

The rest of the guts will fall out of the carcass down to the level of the diaphragm. Pull the diaphragm out of the carcass, strip out the large vein along the backbone, and work the lungs, heart, and the windpipe free. It comes out easier if you use the shears to cut the ribs along the breastbone.

While you've got the guts handy, find the liver. It's a dark, reddish, irregularly shaped organ near the bladder. Slice it open and check for liver flukes. These are small white wormy parasites about the size of a grain of rice. If you see them, STOP and throw the carcass away. Do not feed it to the dog, either.

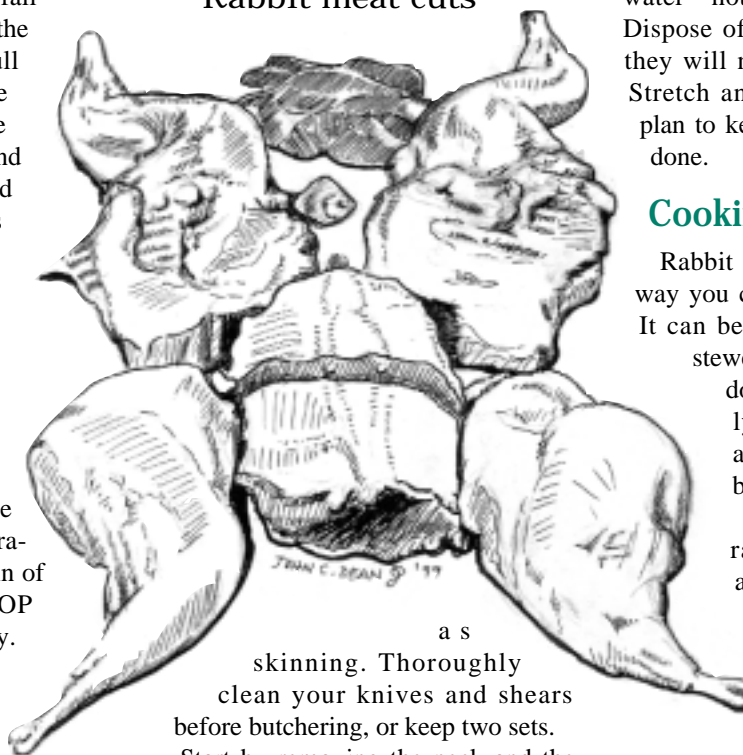
Liver flukes are about the only disease people can get from rabbits. Dogs and cats can get them too. In fact, dogs and cats are the most common source of infestation for rabbits. The flukes don't seem to bother dogs or cats much, but they will eventually kill rabbits. There are other diseases rabbits can get from dogs and cats, and they are another reason to keep pets away from your rabbitry.

Remove the carcass from the gambrel-hooks, cut off the hind feet, and you're ready to clean and cut up the meat. Soak the entire carcass in cold water for 10 or 15 minutes to remove any trace of blood. Hand pick the entire carcass to remove every hair.

Butchering

Most mammals are built on the same plan, so if you know how to butcher one kind, you can pretty well butcher any other. Nevertheless, rabbits are much smaller than other farm animals, so you won't be worrying about steaks and chops. It's more like cutting up a chicken. I make good use of the kitchen shears in butchering, as well

Rabbit meat cuts



as skinning. Thoroughly clean your knives and shears before butchering, or keep two sets.

Start by removing the neck and the arms. Cut through the meat and bone of the neck with the shears. If there are any bruised spots left from killing, discard them. Cut the thin meat around the shoulder blades and the arms come free. Cut off the drumsticks by slicing down through the meat all around the hip joint. When the joint is exposed, either break it or cut through it.

Remove the pelvis by cutting down to any vertebral joint below the ribs.

Cut the meat on either side of the spine as well. Turn the carcass over and cut to the same joint on the other side, then break the joint by hand.

Cut the ribs along the spine. If the rabbit is a large one, cut and break the spine in the middle of the remaining piece as well. If the rabbit is small, this is not necessary. Make sure there is no dried blood or hair on the meat anywhere, rewashing if necessary. Freeze in convenient-size packages or cook and serve as is. Rabbit meat is naturally tender and does not need to be hung.

Clean-up is not difficult. Wash your tools, hands, and clothes in cold

water—hot water will set the blood. Dispose of the guts and head where they will not attract wild predators. Stretch and scrape the skin, if you plan to keep it or sell it, and you're done.

Cooking

Rabbit meat can be prepared any way you can cook a cut-up chicken. It can be barbecued, fried, baked, stewed, roasted, etc. But rabbit does not taste or cook exactly like chicken, and there are other recipes that work better for rabbit.

Europeans eat a lot more rabbit than Americans do and there are special rabbit recipes in the national cuisines of most European countries.

Just about any good German cookbook will contain a recipe for hasenpfeffer, a marinated rabbit dish, for example. Many of these special rabbit recipes are quite complicated. Δ

Rabbit in beer marinade

Here's a simple one that my mother used to make:

- 1 or more rabbits, cut up.
- 1 can of beer per rabbit.
(Cheap beer works as well as fancy imported.)
- 1 can of cream of asparagus soup concentrate or white sauce.

Marinate the rabbit in beer overnight, in the refrigerator, in a covered, non-metallic container.

Drain, place in casserole dish, and spread with soup concentrate.

Bake like poultry, sprinkling occasionally with left-over beer marinade.

Unlike poultry, it is safe to eat rabbit cooked rare, so do not overcook.